

CLAIMS

It is claimed:

1. A terminal having a browser for communicating with World Wide Web, comprising:

a message viewer for communicating with a private network; and

a communication means through which said browser communicates with said World Wide Web and said message viewer communicates with said private network using different logical links, wherein:

said browser includes means for ordering goods from a host computer connected to said World Wide Web, means for receiving a bill for said goods from said World Wide Web, and means for transmitting said bill to said message viewer, and

said message viewer includes means for paying said bill through said private network.

2. The terminal according to claim 1, wherein, said message viewer further includes:

means for receiving information indicative of payment completion from said private network; and

means for transmitting said information indicative of payment completion to said browser, and

said browser includes means for notifying said payment completion to said host computer through said World Wide Web.

3. A terminal having a browser for communicating with World Wide Web, comprising:

a message viewer for communicating with a private network; and

a communication means through which said browser communicates with said World Wide Web and said message viewer communicates with said private network using different logical links, wherein:

said message viewer includes means for ordering goods through said private network, means for receiving a bill for said goods from said private network, payment means for paying said bill through said private network, and means for transmitting information that said order and said payment have been completed to said browser; and

said browser notifies said completion of said order and said payment to said World Wide Web.

4. The terminal according to claim 3,

wherein payment means of said message viewer transmits a credit card number and an expiration date of a user of said terminal to said private network.

5. An information provider having a gateway through which a terminal accesses World Wide Web, and a connection manager which manages a communication through said gateway, comprising:

a message manager which communicates with said terminal independently from

said gateway, wherein:

said gateway includes means for transmitting said goods order input through said terminal to a host computer connected to said World Wide Web; and means for transmitting a price information of said goods from said host computer through said World Wide Web to said terminal, and

said message manager is connected to a payment system which enables payments through a private line, and said message manager includes means for receiving said price information from said terminal, and request means for requesting through said private line said payment system to pay an amount indicated by said price information.

6. The information provider according to claim 5, wherein:

said message manager further includes means for receiving information indicative of payment completion from said payment system; and

said gateway includes means for notifying said payment completion to said host computer through said World Wide Web.

7. An information provider having a World Wide Web gateway through which a terminal accesses World Wide Web, a connection manager for managing a communication conducted through said gateway, and a message manager which communicates with said terminal independently from said gateway, wherein:

said message manager is connected to a payment system which allow payments through a private line;

said message manager includes means for transmitting a goods order, input through said terminal, to said payment system□ means for transmitting a bill for said goods order from said payment system to said terminal□request means for requesting said payment system through said private line to pay said bill, means for receiving information indicative of payment completion from said payment system, and means for notifying said gateway said information indicative of payment completion; and

said gateway includes means for notifying of said payment completion to a host computer through said World Wide Web.

8. The information provider according to claim 7, wherein:

said message manager further includes means for transmitting said payment completion to said connection manager; and

said connection manager has means for having said gateway notify said host computer of said payment completion.

9. The information provider according to claim 8, wherein:

said request means transmits a credit card number and an expiration date of a credit card held by a user of said terminal to said payment system.

10. A system for paying for goods ordered through World Wide Web by a user of a terminal accessing said World Wide Web, said system comprising:

a user database for storing a credit card number and an expiration date of a credit

card owned by said user;

an interface for connecting to a closed network which executes a payment by a credit card;

means for communicating with said terminal using a private network, which is logically independent from a communication established between said World Wide Web and said terminal;

means for receiving information indicative of a paying request an amount of payment and a store dealing in said goods from said terminal through said private network;

means for reading said credit card number and said expiration date from said user database;

means for transmitting said information indicative of said amount of payment and said store dealing in said goods, together with said credit card number and said expiration date to said private network; and

means for receiving information indicative of that said credit card has been verified.

11. A system for paying for goods ordered by a user of a terminal through a network, comprising:

a user database for storing a credit card number and an expiration date of a credit card owned by said user;

an interface for connecting to a closed network which executes a payment by a credit card;

means for connecting to said terminal using a private network, which is logically

independent from communication established between said terminal and said World Wide Web;

means for receiving from said terminal, through said private network, an order for said goods to store which is dealing in said goods;

means for transmitting a bill for said order to said terminal through said private network;

means for receiving a confirmation about said bill from said terminal through said private network;

means for reading out said credit card number and said expiration date from said user database; and

means for receiving information indicative of that said credit card has been verified from said closed network.

12. The system according to claim 11, further comprising:

a store database for storing a store name, which deals in goods, in association with said connection address of said host computer of said store;

means for reading out said connection address of said host computer, which is identified by said store name, from said store database;

means for connecting to said host computer using said connection address through said private line; and

means for notifying said host computer of said information indicative of that said credit card has been verified through said private line.

13. A recording medium which stores a program for working on CPU of a terminal connected to a public network, said program comprising:

a browser module for causing said CPU to communicate with World Wide Web;

and

a message viewer module for causing said CPU to communicate with a private network through a logical line which is independent from a communication established between said browser module and said World Wide Web, wherein:

said browser module includes means for causing said CPU to give an order for goods to a host computer connected to said World Wide Web; means for causing said CPU to receive a bill for said goods from said World Wide Web; and means for causing said CPU to transmit said bill to said message viewer; and

said message viewer module includes means for causing said CPU to execute a payment for said goods using said private network.

14. The recording medium according to claim 13, wherein:

said message viewer module further includes means for causing said CPU to receive information indicative of payment completion from said private network; and means for causing said CPU to transmit said payment completion to said browser module; and

said browser module further includes means for causing said CPU to notify said host computer of said payment completion through said World Wide Web.

15. A recording medium which stores a program for working on CPU of a terminal connected to a public network, said program comprising:

a browser module for causing said CPU to communicate with World Wide Web;

and

a message viewer module for causing said CPU to communicate with a private network, wherein

said message viewer module includes means for causing said CPU to give an order for goods to said private network□means for causing said CPU to receive a bill for said goods from said private network□means for causing said CPU to execute payment for said goods through said private network□and means for causing said CPU to indicate that said order and said payment have been completed to said browser; and

said browser module includes means for causing said CPU to notify said World Wide Web of said completion of said order and said payment.

16. The recording medium according to claim 15 wherein:

said message viewer module causes said CPU to transmit a credit card number and an expiration date of a credit card held by a user of said terminal user to said private network during said payment process.